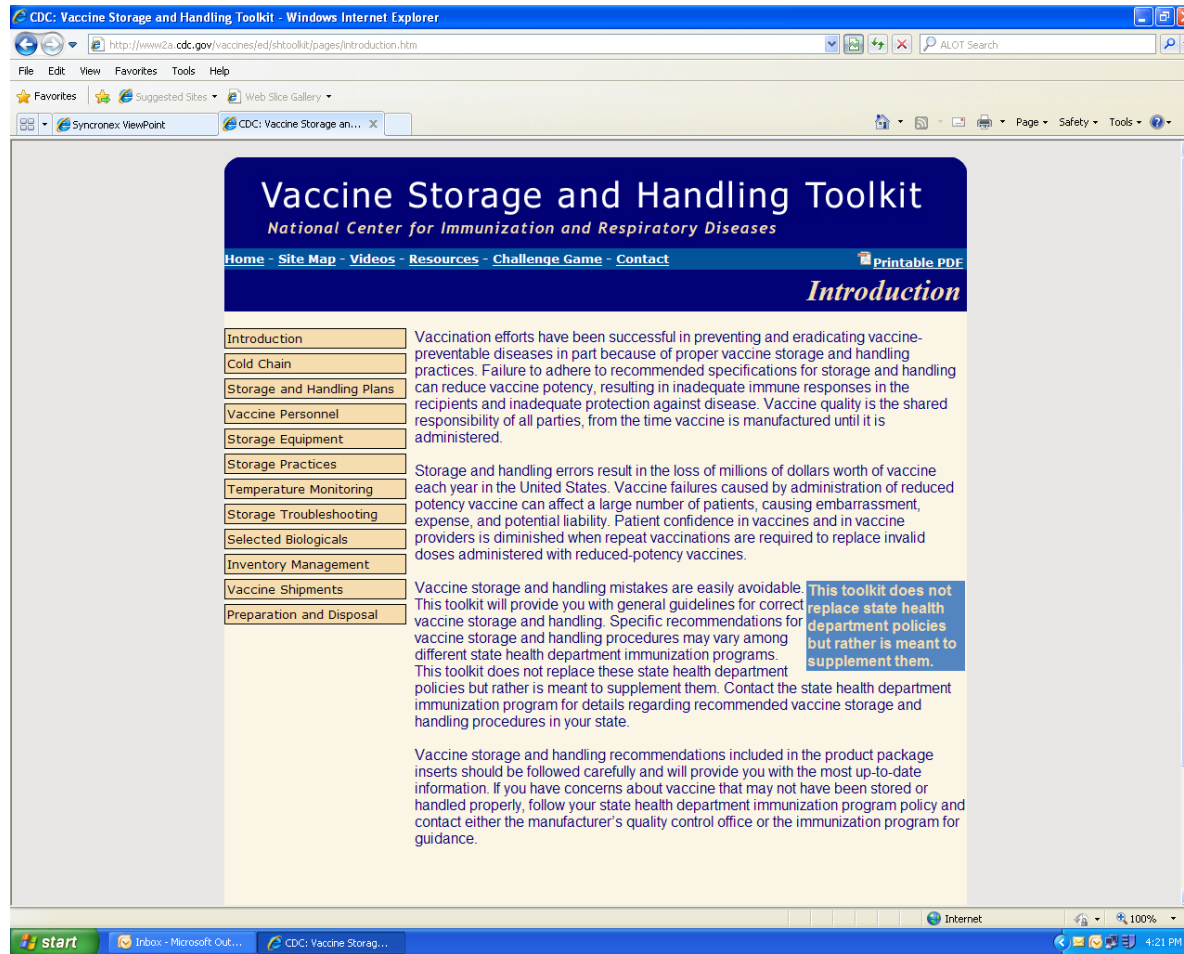


VACCINE STORAGE AND HANDLING

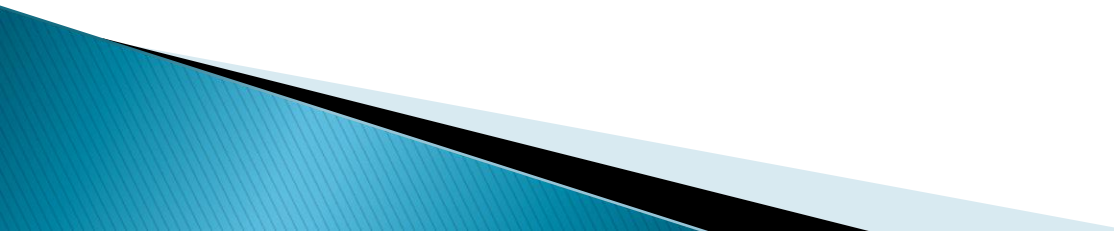
Pam Forest

Nevada State Immunization Program

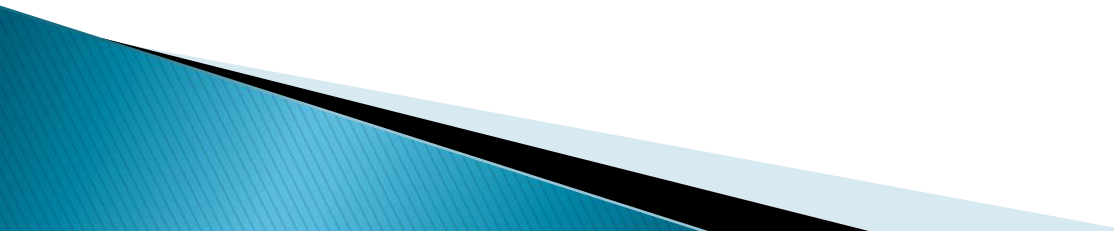
<http://www2a.cdc.gov/vaccines/ed/shtoolkit/pages/introduction.htm>



COLD CHAIN REQUIREMENTS

- ▶ All flu vaccine preparations must be continuously refrigerated
 - ▶ **NEVER FREEZE INFLUENZA VACCINE**
 - ▶ Temperature should be 35 – 46°F (2–8 °C)
 - ▶ Certified, calibrated thermometer is needed
Temperature monitoring requires a scientific instrument to guarantee accuracy.
- 

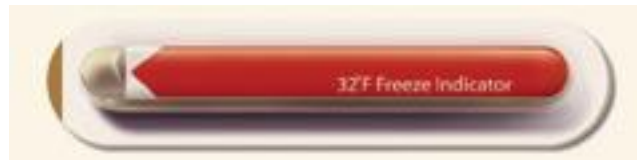
COLD CHAIN REQUIREMENTS

- ▶ Temperature must be checked and recorded in the morning and in the afternoon.
 - ▶ Different styles of calibrated thermometers can be used.
 - ▶ Some types of thermometers must be calibrated every 2 years
- 

HEAT – TEMPERATURE INDICATOR



FREEZE MARK INDICATOR



CERTIFIED CALIBRATED BOTTLE THERMOMETER



CERTIFIED CALIBRATED DIGITAL THERMOMETER



CERTIFICATE OF CALIBRATION

Temp-Chex Digital



Certificate of Accuracy

*Certifikát přesnosti / Certificat de précision / Genauigkeitszertifikat / Certificato di accuratezza /
Nøyaktighetssertifikat / Certificado de precisión / Certifiering av noggrannhet*

Type: Temp-Chex Digital
Typ / Type / Typ / Tipo / Tipo / Typ

Serial Number Series: 08E0001-08E1150
Sériová čísla / ntervalle de numéros de série / Seriennummernreihe / SNumero di serie /
Seriennummerserier / Serie, n.º de serie / Seriennummerserier

REF 240056

LOT 82490270

Range: -50° to 200°C
Rozsah: -50 ° až 200 °C
Plage : -50 à 200 °C
Bereich: -50°C bis 200°C
Intervallo: da -50 ° a 200 °C
Verdiområde: -50 til 200 °C
Intervalo: -50 a 200 °C
Område: -50 – 200 °C

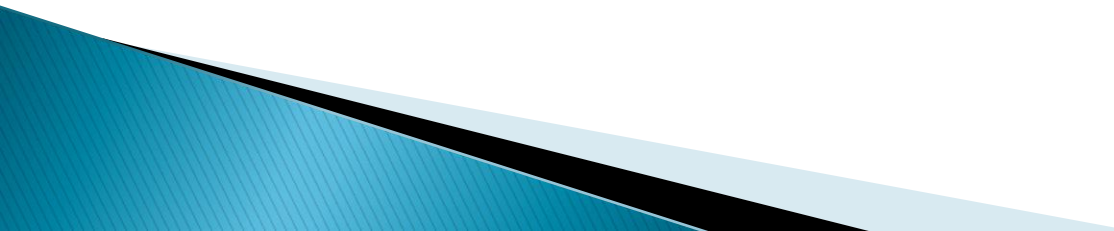
This is to certify that the thermometer bearing the serial number within the series shown above was compared with a Standard calibrated at the National Institute of Standards and Technology (NIST) and Deutscher Kalibrierdienst (DKD), and was found to be accurate to within $\pm 1^\circ\text{C}$ between -50 and 120°C , $\pm 2^\circ\text{C}$ between 120 and 150°C , $\pm 4^\circ\text{C}$ between 150 and 200°C .

Temp-Chex Digital thermometers will not need calibration for the life of the product.
The unit serial number can be found inside the battery compartment.

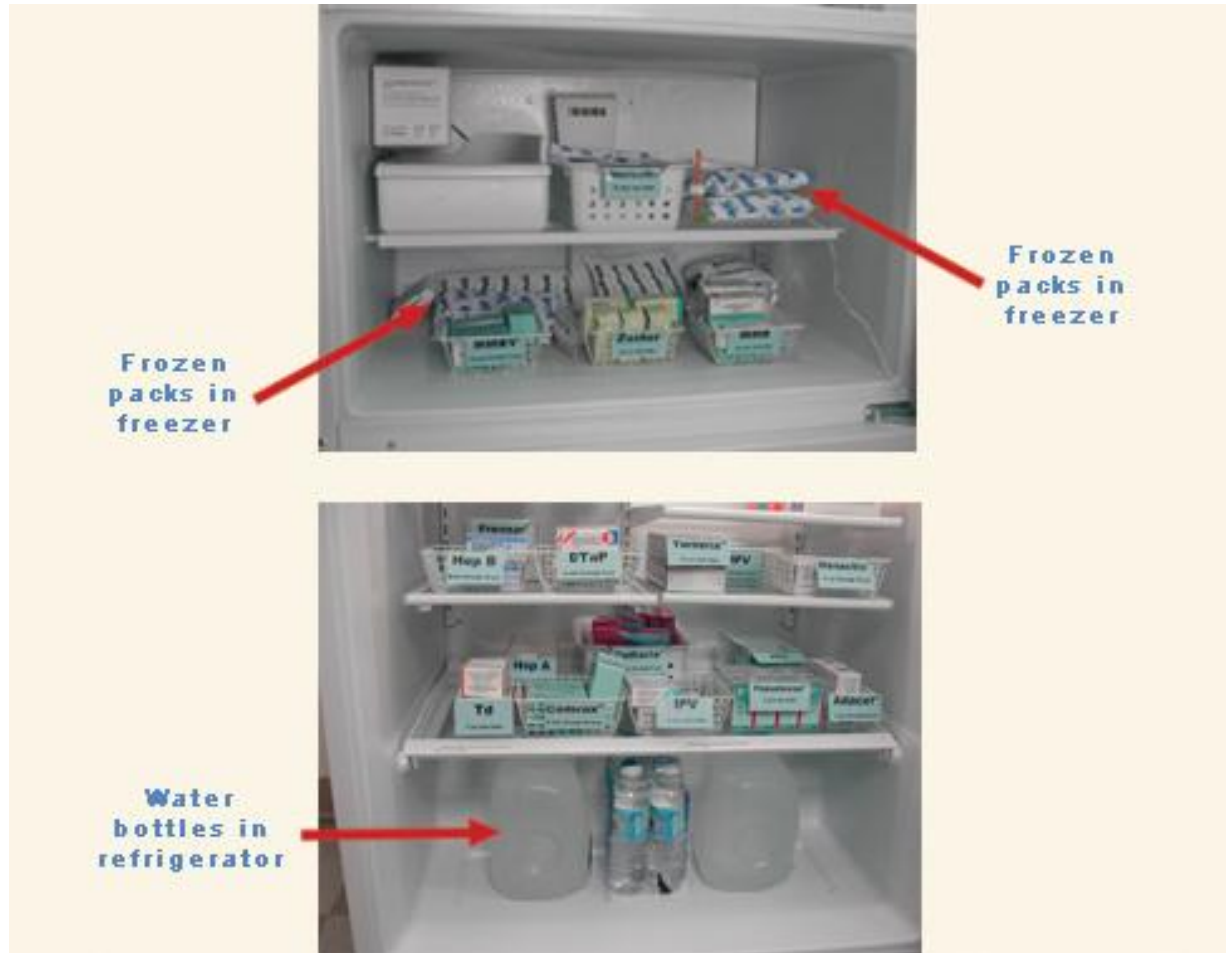
Tímto se potvrzuje, že teploměr se sériovým číslem spadajícím do výše uvedené série byl porovnán se standardem kalibrovaným v Národním ústavu pro standardy a technologie (National Institute of Standards and Technology, NIST) a v akreditované laboratoři Deutscher Kalibrierdienst (DKD), a byla u něj zjištěna přesnost v rozmezí $\pm 1^\circ\text{C}$ mezi -50 a 120°C , $\pm 2^\circ\text{C}$ mezi 120 a 150°C , $\pm 4^\circ\text{C}$ mezi 150 a 200°C .

Teploměry Temp-Chex Digital nevyžadují kalibraci po celou dobu životnosti výrobku.
Sériové číslo jednotky se nachází uvnitř prostoru pro baterie.

VACCINE STORAGE UNIT

- ▶ Commercial grade or kitchen style unit may be used
 - ▶ If a kitchen style unit is used, there must be 2 controls – one for the refrigerator and one for the freezer if both compartments are used for vaccine storage
 - ▶ Must be large enough to accommodate the vaccine
 - ▶ Not older than 10 years
- 

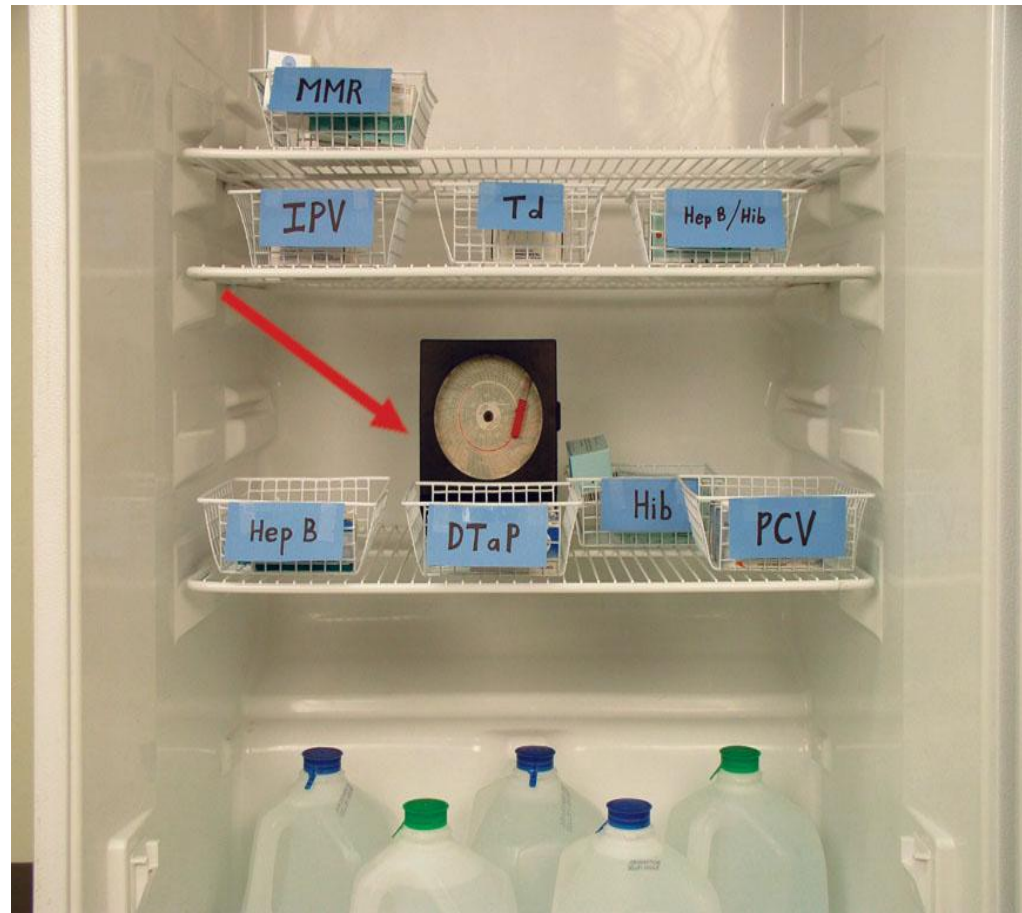
ACCEPTABLE EXAMPLE



UNACCEPTABLE STORAGE UNIT



THERMOMETER PLACEMENT IN THE VACCINE STORAGE UNIT



PREVENT SEVERENCE OF ELECTRICAL POWER BY MAINTENANCE



THE RIGHT VACCINE MANAGEMENT

The right staff education – involve everyone in the office

The right storage equipment

The right storage temperature

The right plan to handle storage problems

